

REMARKS

Claims 1-15, 24-29 and 33 were pending in the application prior to the present amendment. Claims 1-15, 24-29 and 33 are herein cancelled. Claims 34-55 are herein added.

Claims 1-15, 24-29 and 33 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Foran et al. (U.S. Patent No. 6,072,500) in view of Cosman (U.S. Patent No. 5,651,104). In addition, Claims 1-15, 24-29 and 33 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Foran in view of Smyers (U.S. Patent No. 6,313,880). Applicant respectfully disagrees with these rejections. However, in order to expedite the application towards an allowance, Applicant has cancelled the currently pending claims and added new claims.

Claim 34 recites in pertinent part :

“a graphics processor configured to receive graphics primitives and to perform rendering operations on the graphics primitives to obtain a plurality of samples that represent an image, wherein the rendering operations are performed according to a plurality of screen-space regions, wherein graphics primitives that fall within a first of the regions are rendered with a different density of samples in screen space than graphics primitives that fall within a second of the regions.”

None of the cited references suggests this combination of features.

As the Examiner has noted, the primary reference (Foran) never suggests “different densit[ies] of samples in screen space” as claimed. However, the Examiner argues that this deficiency in Foran is remedied by Cosman. In particular, the Examiner points to several sections of Cosman that indicate that a pixel may be projected onto a polygon (Figure 4). The number of texture samples that a projected pixel footprint 40 will experience on its long dimension depends on the aspect ratio of the footprint 40 (Col. 3,

line 31- Col. 4, line 8). The aspect ratio is itself dependent on the orientation of the polygon as seen from a virtual eye point (Col. 6, lines 7-26). It appears that the Examiner is identifying the “pixel footprints” of Cosman with the claimed “regions”. This identification is inconsistent with the claimed feature that “graphics primitives that fall within a first of the regions are rendered with a different density of samples in screen space than graphics primitives that fall within a second of the regions”. There is no sense in which graphical primitives may fall within footprints of Cosman. In fact, Cosman teaches the opposite: footprints are within polygons (as it clearly apparent from Cosman Figure 4, wherein item 20 is the polygon and item 40 is the pixel footprint).

The Examiner also points to Smyers as a remedy for the above-noted deficiency in the teaching of Foran. The Smyers reference discloses:

A television with multiple display windows and placement dependent cursor and function control is configured to receive and simultaneously display video and graphics input from multiple devices, including but not limited to personal computers, video cassette recorders, settop boxes, video cameras and video disk players, as well as display video input signals from cable, antenna and satellite sources. The size of each display window is adjustable to encompass a predetermined amount of the display screen of the television. Multiple input windows driven by multiple devices can be viewed simultaneously. One or more cursor control and input devices are used to control the operation of the television and of the devices driving the display windows. The cursor control and input devices control the position of the cursor on the television screen. When the cursor is positioned within one of the input display windows, the cursor control and input devices are used to control the operation of the device driving that input window, through signals sent from the television to the appropriate device. (Cosman Abstract) (Emphasis Added).

Note that Smyers speaks of multiple windows being displayed simultaneously on a display screen and each having adjustable screen size. However, Smyers never suggests that the different displayed windows are rendered using different sample densities as claimed. It is not correct to infer *different sample densities in screen space* from different window sizes on a display screen.

The Examiner points to Smyers Col. 3, lines 36-55 as evidence for “different densit[ies] of samples”. Col. 3, line 36-55 recites:

After receiving a request to establish a display window from a driving device, the television 10 then sends an acknowledging response back to the driving device indicating whether the request was successful or not. If the connection request was successful and the television 10 is able to create a display window, then the acknowledging response contains a handle to the display window, information regarding the characteristics of the display window including the x position, y position, width, height, color depth and color space of the window and an IEEE 1394 offset address to the television display space where the window begins. If the connection was not successful, the response to the driving device includes information regarding the reasons for the failed connection. For example, if the PC 14 specified a width for the display window which cannot be accommodated by the television 10, then the information within the response includes the width of a display window that could be accommodated by the television 10. In this case, the PC 14 is then able to adjust its parameters to fit within the available parameters. (Emphasis added)

This passage speaks of the creation of a display window with given characteristics such as position, width, height and color depth. However, this passage never suggests anything regarding the use of different sample densities in screen space as claimed.

Thus, claim 34 and its dependents are believed to be patentably distinguished over the cited references at least for the reasons given above.

Claims 49 and 52, and their dependents, are believed to be patentably distinguished over the cited references based on reasoning similar to that given above.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above-referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel P.C., Deposit Account No. 50-1505/5181-09612/JCH.

Also filed herewith are the following items:

- ☐ Request for Continued Examination
- ☐ Terminal Disclaimer
- ☐ Power of Attorney By Assignee and Revocation of Previous Powers
- ☐ Notice of Change of Address
- ☐ Other:

Respectfully submitted,

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